



STATE OF UTAH
NATURAL RESOURCES & ENERGY
Oil, Gas & Mining

Scott M. Matheson, Governor
Temple A. Reynolds, Executive Director
Cleon B. Feight, Division Director

4241 State Office Building • Salt Lake City, UT 84114 • 801-533-5771

MEMORANDUM

TO: The Board of Oil, Gas and Mining

FROM: Susan C. Linner, Reclamation Biologist *SCL*

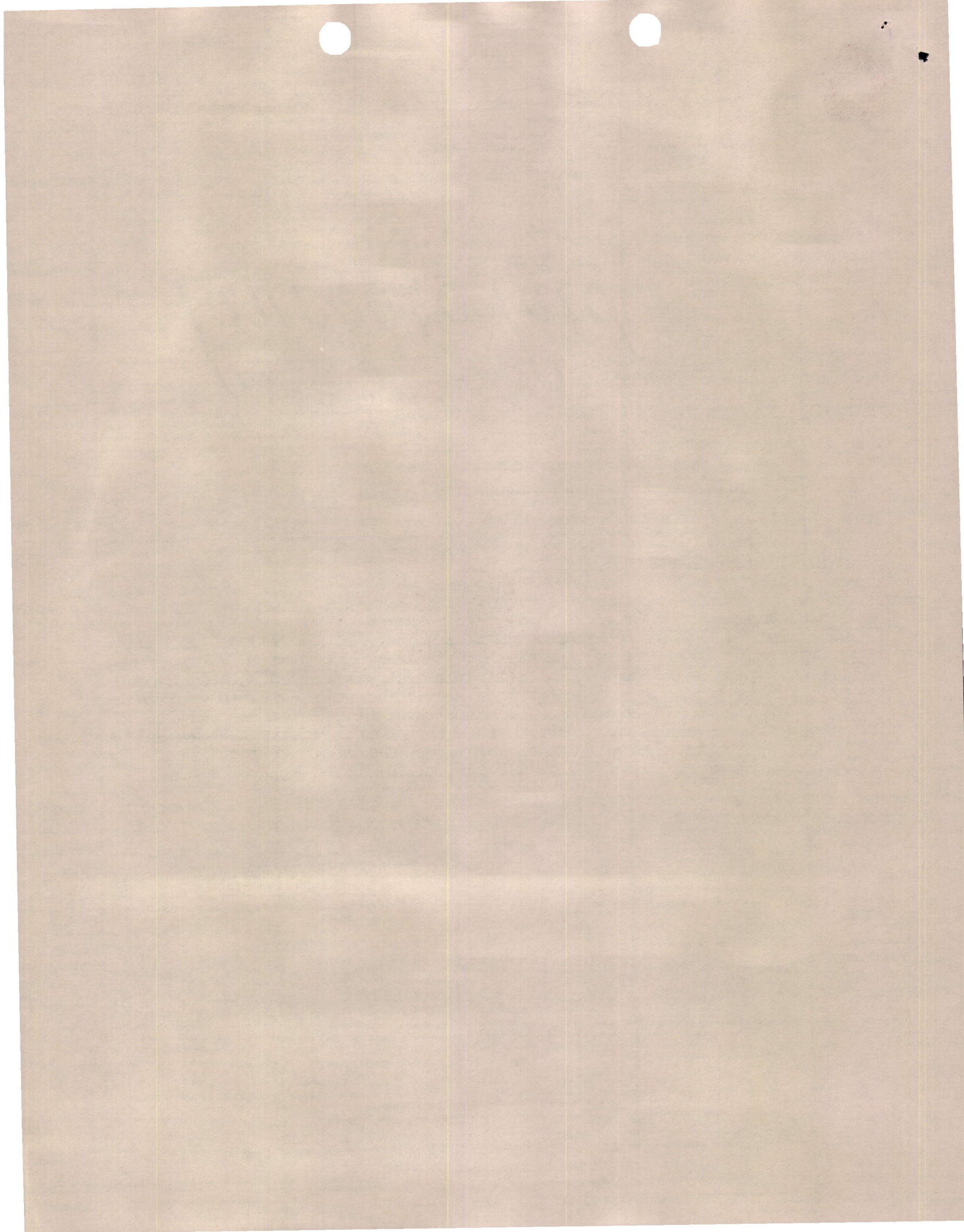
SUBJECT: Tentative Approval
Westwater, Inc.
Harley Dome Minerals Mine
ACT/019/012
Grand County, Utah

DATE: September 8, 1982

The Division of Oil, Gas and Mining staff have reviewed the Mining and Reclamation Plan (MRP) submitted by Westwater, Inc., for the Harley Dome Minerals Mine. At this time, the Division still has some concerns with sections of the MRP. However, these are relatively minor details, and it was not felt that it was worth holding up the permitting process to resolve them. Therefore, the staff recommends tentative approval for the mine, and the amount of the surety at this time. However, final approval would not be granted until all points of contention have been resolved. An Executive Summary and bond estimate are attached for your review and information.

SCL/btb

Attachment



EXECUTIVE SUMMARY

Westwater Incorporated
Harley Dome Minerals Mine
ACT/019/012, Grand County, Utah
Section 22, Township 19 South, Range 25 East

Background Information

Westwater, Incorporated of Hawthorne, Nevada, has submitted a Mining and Reclamation Plan (MRP) for the Harley Dome Minerals Mine. The applicant proposes to surface mine humate material from a 250 acre area near Harley Dome, Utah. Humates mined from the area would be used as a soil conditioner. The mining method would be strip mining requiring a cut and fill process. The raw material would be stockpiled at the mining site and then hauled five miles by truck to the Westwater rail siding. The material would then be transported by train to California for final processing.

Location

The proposed project site is located approximately 65 miles east along I-70 from Green River, Utah, and three miles south on a county road from Harley Dome, Utah. The area is five miles west of the Utah-Colorado State Line (see attached map). The site is leased from the United States Bureau of Land Management (BLM). Mining of humates will occur on 250 acres within Section 22, Township 19 South, Range 25 East, SLB&M.

Geology

Geologically, the area is located on the south flank of the Grand River Valley in a region dominated by anticline-syncline structures that trend in a sub-parallel fashion to form the northwestwardly plunging Uncompahgre uplift, the major structural feature. Local relief of the area is on the order of several hundred feet. The exposed strata include shales, mudstones, siltstones and sandstones. The humates occur as black to grey carbonaceous shales which are interbedded within the upper part of the Dakota sandstone, the capping formation in the mine area.

Soils

The majority of the area proposed to be mined has shallow, well-drained, moderately rapidly permeable soils. The soil is derived dominantly from sandstone and is mildly to strongly alkaline (pH 7.9 - 9.0). Surface runoff is slow, with the hazard of water erosion slight and the potential wind erodibility of the soil is low to moderate.

Topsoil will be removed and saved from all cuts. Any topsoil to be stored for more than one year will be revegetated with an approved seed mix.

Hydrology

There are no live water sources or stockpounds on the proposed project site. Small collection ponds constructed in wash bottoms provide a limited supply of water for livestock and wildlife. Summer thunder showers account for the majority of the six inches per year of precipitation.

DIVISION OF OIL, GAS, AND MINING

BOND ESTIMATE

OPERATOR: Westwater, Inc.
MINE NAME: Westwater Humus Mines
LOCATION: Section 22, Township 19 South, Range 22 East
COUNTY: Grand County, Utah
DATE: August 27, 1982

	Operation	Amount	Rate	Cost
A.	CLEAN-UP			
	1. Removal of structures & equipment.	NA		
	2. Removal of trash & debris.			
	3. Leveling of ancillary facilities pads and access roads.			
B.	REGRADEING & RECONTOURING			
	1. Earthwork including haulage and grading of spoils, waste and overburden.	1 acre	D-6 for 20 hrs @ \$75/hr	\$1,500.00
	2. Recontouring of highwalls and excavations.			
	3. Spreading of soil or surficial materials.			
C.	STABILIZATION			
	1. Soil preparation, scarification, fertilization, etc.	1 acre	Seed drill 25 hrsp. \$8/hr	200.00
	2. Seeding or planting.			
	3. Construction of terraces, water-bars, etc.	1 acre	Seed (20# - PLS)	200.00
D.	LABOR			
	1. Supervision.			
	2. Labor exclusive of bulldozer time.			
E.	SAFETY			
	1. Erection of fences, portal coverings, etc.			
	2. Removal or neutralization of explosive or hazardous materials.			
F.	MONITORING			
	1. Continuing or periodic monitoring, sampling & testing deemed necessary.		\$1,000/yr for 3 yrs.	3,000.00
	2. Irrigation		Water truck 16 hrs @ \$43.75/hr	700.00
G.	OTHER			
	15 acre - \$39,000			
	Monitoring - \$ 3,000			2,600.00/acre

Westwater Bond (continued)
Page Two

	<u>COST</u>
1. Backfilling and Grading - 20 hrs @ \$75/hr D-6 (D-6C, 10K)	\$ 1,500.00
2. Revegetation - A. Mechanical Spreader, 25 hrs @ \$8/hr	200.00
B. Seed (20# PLS drilled)	200.00
3. Irrigation - 5 miles from river \$43.75/hr - 2,000 gallons Water Truck 4 hrs/day X 4 days \$43.75/hr X 16 hrs -	<u>700.00</u>
\$2,600 X 15 acres = \$39,000	\$ 2,600.00/acre
Monitoring \$1,000/year for 3 years =	\$ 3,000.00
Bonding is for 15 acre increments	<u>39,000.00</u>
	<u>\$42,000.00</u>
10% Administrative Cost	<u>4,200.00</u>
	<u>\$46,200.00</u>

@ 12% Inflation:

1982 - \$46,200
1983 - \$51,744
1984 - \$57,953
1985 - \$64,908
1986 - \$72,697

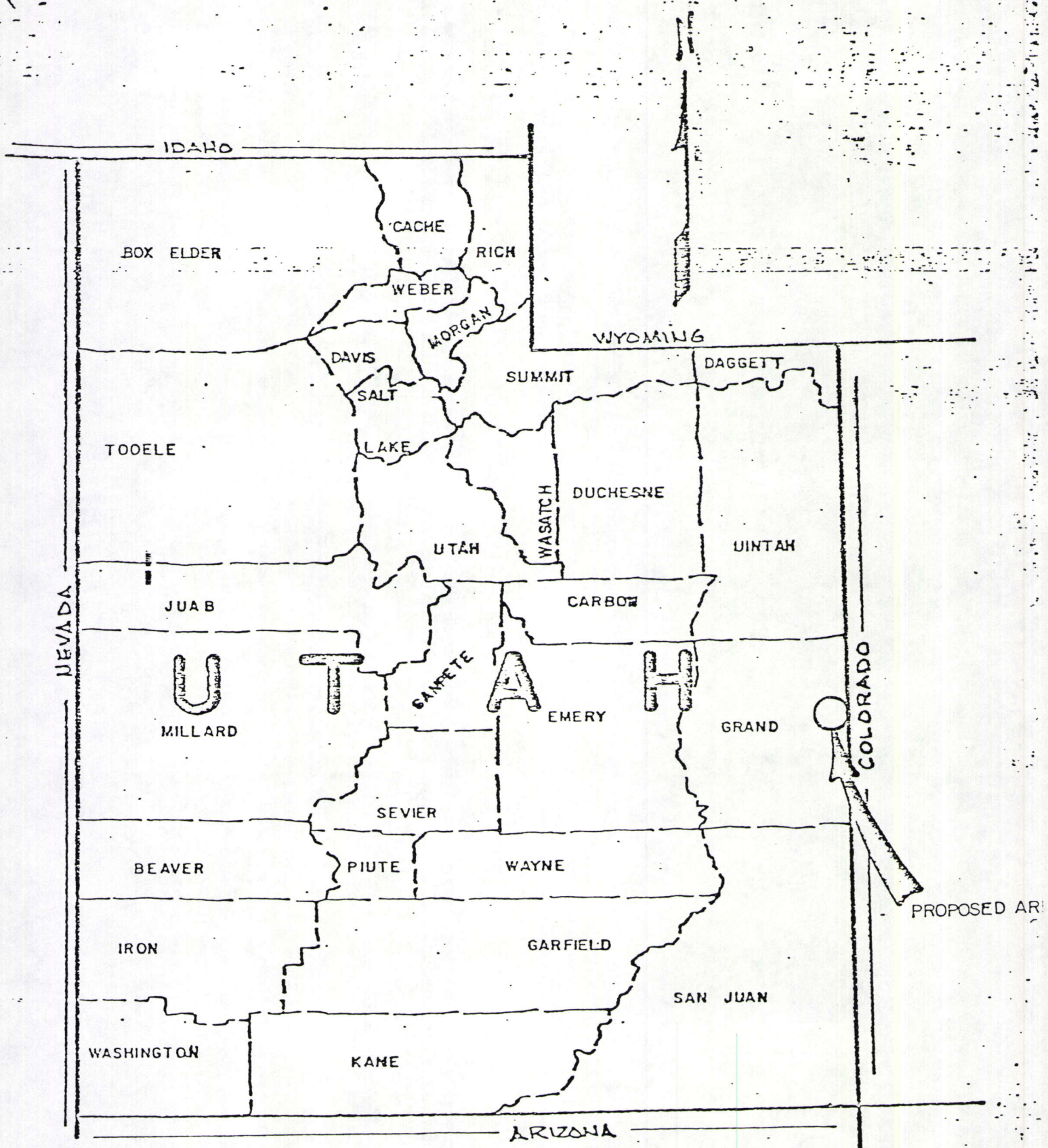


Figure 1
PROJECT LOCATION